

July 9, 2010

Mr. Philip Giudice Commissioner Department of Energy Resources 100 Cambridge Street, 10th Floor Boston, Massachusetts 02114

Re: <u>Initial Comments on the Manomet Biomass Sustainability and</u>

<u>Carbon Policy Study – Submitted by Email</u>

Dear Commissioner Giudice:

Pinetree Power Fitchburg, Inc. ("Pinetree") submits these comments to the Department of Energy Resources ("DOER") in response to your June 10, 2010 letter soliciting initial comments on the "Biomass Sustainability and Carbon Policy Study" prepared by the Manomet Center for Conservation Sciences (the "Manomet Study").

Pinetree owns and operates a 17 MW wood-fueled steam-electric generating station located in Westminster. This power plant has been in operation approximately eighteen years and provides more than 120 jobs in the power plant, fuel procurement, and related areas. The power plant purchases about 95% of its wood fuel supply from within the Commonwealth. Pinetree's economic viability and the continuation of its associated jobs are directly affected by the amount of revenue it receives for the sale of its electricity and the price it pays to acquire its wood fuel.

Pinetree sells its electrical output under a twenty year long-term contract that will expire in the next few years and it will seek a new contract soon. Pinetree's future economic viability, given the difference between its historic contract revenue and the revenue expectation in near term power sales markets, will turn on revenue expectations from renewable portfolio standard laws. Hence, potential policy changes to the Commonwealth's renewable portfolio standard law ("RPS") arising from evaluation of the Manomet Study that affect a facility's eligibility for the RPS generally or the cost of RPS eligibility will have a significant effect on Pinetree, its employees, and those employed in Pinetree fuel procurement.

Given the complexity and length of the Manomet Study, its recent public release, and the opportunity to participate in planned stakeholder and rulemaking processes noted in your June 10 letter, Pinetree offers the following initial observations on the study's use as a policy tool for potential RPS revisions.

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1. It is not clear that the Manomet Study's carbon accounting is done at a level of detail that reflects the wood procurement practices of existing wood power plants and in particular the attributes of Pinetree's combustion mix.

Wood-fueled generation facilities like Pinetree procure wood from a variety of sources, including: (i) waste wood that would be cut regardless of the power plant's needs (e.g., power line trimmings, tree service cuttings, right of way clearings), (ii) storm damage wood (e.g., the 2009 ice storm produced the need to dispose of large amounts of wood material), and (iii) the tree tops, branches and slash that are the by- product of other non-power plant forest improvement and harvesting work. Manomet's June 21, 2010 statement does note that "when the wood used...is all or nearly all logging debris that would have decomposed in the forest anyway, the [carbon] debt period can be relatively short, even for large scale electricity generation where biomass replaces coal." See Manomet study at 109-110 (stating that certain waste woods, like tops and limbs, have a rapid carbon loss recovery and biomass energy technologies "look favorable when biomass waste wood is compared to fossil fuel alternatives"). Any proposed RPS regulatory changes should be evaluated in light of the types of wood procured and whether this creates a different carbon accounting.

In addition to combusting wood fuel as its primary fuel, Pinetree also combusts landfill gas methane from the Waste Management landfill located across the road from the power plant. Such methane combustion is significant for greenhouse gas ("GHG") emissions reduction because one ton of methane is the equivalent in GHG terms of about 25 tons of CO₂. Any proposed RPS regulatory changes based on CO₂ issues should identify and address other forms of carbon offset and mitigation in the carbon accounting model. Furthermore, it is not clear that the Manomet study accounts for avoidance of the methane that would have been produced by the decomposition of waste wood in the forest, but for its combustion (and hence methane destruction) in a wood-fueled power plant.

2. The Manomet Study's Focus is CO₂ Emissions. Energy policy determinations, such as changes to RPS biomass eligibility criteria, however, should be made based on the evaluation and weighing of a number of factors, and goals, and the economic consequences of the resulting policy choices.

With regard to emission criteria, the Manomet Study examines a single emission, CO₂. The study team was not charged with studying, and therefore did not study, the relative merits of energy generation technologies across the range of air, water and waste emissions or the host of other policy issues that may cause one to favor a particular technology at some supply level. It is problematic to impose new eligibility criteria on biomass power plants based on, e.g., CO₂ emissions (that due to the cost of compliance could constrain the supply of or eliminate such facilities) without considering that other generation technologies may have NO_x, SO₂, and particulate matter ("PM") impacts or may need to landfill combustion waste products (e.g., coal ash), while wood ash is a useable commodity. Manomet's June 21, 2010

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statement clarifying issues arising under its report notes that "Emissions of these pollutants [NO_x, SO₂, and PM] vary considerably between wood and fossil fuel energy systems, and are an important consideration in determining the relative merits of biomass and fossil fuels."

Other factors that should be taken into account in considering policy changes that may limit or adversely impact the amount of wood power plant in the regional power plant supply include: (i) the value associated with promoting a renewable generation resource that procures its fuel supply in the Commonwealth and region, (ii) the value of fuel diversity in the energy mix, (iii) the value of dispersed generation as such and its benefit to the local economy, (iv) the need for wood plant renewable base-load generation to compliment other renewable intermittent generation sources, and (v) the beneficial effect of wood procurement policies on the value of the remaining timber stand as a recreational resource, a commercial resource (e.g., lumber and paper), and wildlife habitat. Regarding the later point, forest management economics are significantly improved (and, hence, the quality of the managed forest is improved) by the market for waste wood (e.g., tops, branches and slash from non-power plant forestry work) created by sales of such material to wood-fueled power plants. These sales subsidize the forestry work and in their absence such work would be more expensive and in some cases may not occur.

3. The Manomet study is new, has already been significantly misinterpreted, and at least one other significant study views biomass as a favorable form of generation in terms of CO₂ emissions.

The Manomet study is a lengthy document that has just been released, has not been peer reviewed, and has already been the subject of misinterpretation. In seeking to correct some of these misinterpretations Manomet's June 21 statement notes that the claim that combusting wood is worse than combusting coal is an "inaccurate interpretation of our findings." The Biomass Energy Resource Center, a contributor to the Manomet Study, also noted that this "wood worse than coal" claim was inaccurate. The European Climate Foundation also studied biomass sustainability and CO₂ emission issues and released a June 10, 2010 report that has a favorable view of biomass combustion, and also noted that it can aid in reducing "carbon dioxide emissions from coal power plants with long remaining life-times."

The concept of carbon accounting for biomass power generation is a complex undertaking and models may produce different conclusions depending on the model, carbon accounting data, and mitigation factors (such as inclusion of methane released from forest waste wood decomposition) and other assumptions used. RPS policy will benefit from a thorough evaluation of the Manomet study.

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Pinetree appreciates your consideration of these comments and welcomes any questions you may have on the foregoing.

Sincerely,

Joe Dalton

Director, Government & Regulatory Affairs